

Notice of Allowability

Application No.

09/991,697

Examiner

Sudhanshu C. Pathak

Applicant(s)

YASAKI, TAKAHIRO

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Nov. 29th, 2005.
2. ☒ The allowed claim(s) is/are 4,6 and 8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. Claims 4, 6 and 8 are pending in the application.
2. Claims 1-3, 5 and 7 have been canceled.

Allowable Subject Matter

3. Claims 4, 6 & 8 and re-numbered as claims 1-to-3 respectively are allowed.
4. Claims 4, 6 & 8 and re-numbered as claims 1-to-3 respectively are allowable over the prior art of record because the cited references do not contain the specified limitation of a path searcher, for a spread spectrum receiver for receiving a spread spectrum signal wherein: the receiver includes a plurality of correlators, wherein each of the correlators produces a replica of a scrambled synchronization code and determines a correlation value between said replica and the received spread spectrum signal; the path searcher comprises: a first memory for storing the received spread spectrum signal, each of said correlators: reads the stored spread spectrum signal from the first memory at a rate higher than a chip rate of said received spread spectrum signal, repeatedly performs a correlation operation between the read spread spectrum signal and said replica at said higher rate by successively shifting said replica with respect to said stored spread spectrum signal; the path searcher further comprises a second memory for initially storing an intermediate result of a correlation value from each of said correlators and for subsequently reading the stored intermediate result into a corresponding one of said correlators; each of said correlators adds the intermediate result from the second memory with a correlation value produced by


the correlation operation performed at the end of the chip interval; and each of said correlators comprises: a multiplier for multiplying the spread spectrum signal read from the first memory and said replica at said higher rate, an adder for summing an output signal of the multiplier with a previous value, delay means for delaying an output signal of the adder, and a selector for supplying the delayed output signal to said adder as said previous value during an initial portion of a chip interval and for supplying the stored intermediate results from said second memory to said adder at the end of the chip interval.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571)-272-3056
 - The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sudhanshu C. Pathak



STEPHEN CHIN
SUPERVISORY PATENT EXAMINER
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